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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Derek Ward

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09/22/2006

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EXAMINER

JARRETT, RYAN A

ART UNIT

PAPER NUMBER

2125

DATE MAILED: 09/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/986,650

Applicant(s)

WARD, DEREK

Examiner

Ryan A. Jarrett

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 June 2006 and 25 August 2005 and 14 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3,4,8-19 and 21-27 is/are pending in the application.
- 4a) Of the above claim(s) 10-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3,4,8,9,15-19 and 21-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 July 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>6/16/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of claims 3, 4, 8, 9, 15-19, and 21-27 in the reply filed on 08/25/2005 is acknowledged.

Claims 10-14 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 08/25/2005.

Priority

2. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in New Zealand on 11/9/00. It is noted, however, that applicant has not filed a certified copy of the foreign application as required by 35 U.S.C. 119(b).

Information Disclosure Statement

3. The information disclosure statement filed 06/26/2006 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because it fails to comply with 37 CFR 1.97(c). It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing

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the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609.05(a).

The information disclosure statement filed 06/26/2006 fails to comply with 37 CFR 1.97(c) because it lacks a statement as specified in 37 CFR 1.97(e). It has been placed in the application file, but the information referred to therein has not been considered.

The information disclosure statement filed 06/26/2006 fails to comply with 37 CFR 1.97(c) because it lacks the fee set forth in 37 CFR 1.17(p). It has been placed in the application file, but the information referred to therein has not been considered.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 17-19 and 21-27 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Per claim 17, the original specification does not appear to disclose "said input register providing identical settled input values, that are not transient at the time of sampling by the user control program circuit, to each user control program circuit".

Per claim 18, the original specification does not appear to disclose "said identical input valves provided in a way so as to be settled and not transient at the time of sampling by the user control program circuit".

Claims 19 depends from claim 18 and incorporates the same deficiency.

The original specification does not appear to disclose the features of claims 21 and 22, which were added in the amendment filed 07/14/2005.

Claims 23-27 depend from claims 21 and 22 and incorporate the same deficiency.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 3, 4, 8, 9, 17-19, and 21-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Vasko U.S. Patent No. 6,463,339. For example, Vasko discloses the features of:

Claim 3 (e.g., col. 2 line 50 – col. 3 line 30, col. 5 lines 45-67, col. 6 lines 38-67)

Claim 4 (e.g., col. 6 lines 38-52)

Claim 17 (e.g., col. 8 lines 12-61, Figs. 7-10)

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Claim 18 (e.g., col. 9 lines 6-16, Fig. 11)

Claim 19 (e.g., Fig. 14a, col. 9 line 59 – col. 10 line 19, particularly col. 10 lines 11-14)

Claims 8, 9, and 21-27 largely recite functional limitations of the claimed “programmable controller”. While not conceding that Vasko et al. does not teach the claimed functionality of these claims, the issue is considered moot since the “controller” of Vasko et al. is *capable* of performing the claimed functionality, *if* programmed to do so. Since Applicant has not explicitly and positively recited a program or software embodied on a tangible computer readable medium which, when executed, would cause the claimed “programmable controller” to execute said functionality, such a program or software is not considered to be contained in the claimed “programmable controller”.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vasko as applied to claim 3 above, and further in view of Spiller U.S. Patent No. 5,057,994. Vasko discloses an input signal monitoring function block used to produce a

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reconciled input value if there is a conflict in values (e.g., col. 10 lines 20-37, Fig. 15). Vasko does not explicitly disclose that this function block receives input signals from multiple duplicate sensors and determines as the invalid signal the odd-one-out. Vasko does however disclose that the same mechanisms described for the output signal processing can be used in the input block processing (col. 10 lines 20-22). The mechanisms referred to here are the determining of the majority gate-array output value (e.g., col. 9 lines 6-67), i.e. (voting or determining odd-one-out). Thus, Vasko just lacks the teaching of multiple duplicate sensors.

Spiller discloses a control system for an industrial plant that includes voting logic for multiple redundant sensors (e.g., claim 1). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Vasko with Spiller since Spiller teaches that the use of redundant sensors reduces the probability of control system failure to produce an extremely reliable control system (e.g., col. 5 line 62 – col. 6 line 3).

Response to Arguments

10. Applicant's arguments, see pages 16-17, filed 07/14/2005, with respect to the 35 U.S.C. 112 1st paragraph rejection of claims 3-4, 8-9, and 17-19 have been fully considered and are persuasive. The 35 U.S.C. 112 1st paragraph rejection of claims 3-4, 8-9, and 17-19 has been withdrawn.

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11. Applicant's remaining arguments, filed 07/14/2005, have been fully considered but they are not persuasive.

On page 18 lines 1-9 of the Arguments, Applicant states, "However, Vasko does not teach any method or means of implementing the program circuit other than describing it as a Boolean logic equivalent of a ladder diagram." While examiner does not necessarily agree with this statement, it is considered moot since it is not clear how this statement pertains to the actual claim language. Applicant has not established how implementing a program circuit by describing it as Boolean logic equivalent of a ladder diagram, if true, necessarily precludes any of the actual claim language, particularly the language of claim 3.

Likewise, it is not clear how Applicant's arguments on page 18 line 18 – pg. 19 line 9 pertain to any of the actual claim language, particularly the language of claim 3.

In response to applicant's arguments on page 18 lines 10-17, page 18 line 24, and page 19 lines 9-14 that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "flip-flops, sampling and storing values, or more complex functions", "running, pausing and stopping", "settled signals", "clocked synchronous operation") are not recited in at least rejected claim 3. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). It is noted that instant claim 4 does recite a "clocking means". Vasko discloses a clocking means in col. 6 lines 38-52.

On page 19 lines 13-14, Applicant argues that Vasko does not disclose user circuit state data. However, Vasko discloses user circuit state data in at least col. 3 line 56 – col. 4 line 2, col. 7 lines 15-30, col. 8 lines 51-61, and col. 13 lines 6-10.

On page 19 lines 15-16, Applicant argues that Vasko does not disclose input registers as recited in claim 3. However, Examiner asserts that Vasko discloses input registers in Fig. 2 for example (I/O blocks 40).

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan A. Jarrett whose telephone number is (571) 272-3742. The examiner can normally be reached on 10:00-6:30 M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on (571) 272-3749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Ryan A. Jarrett
Examiner
Art Unit 2125

9/18/06
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